WHAT IS CLAIMED IS:

1. A system for deploying within a body vessel an embolic protection device, which includes a guide wire, an expandable filter disposed on the guide wire, and a retractable restraining sheath for maintaining the expandable filter in a collapsed position, comprising:

a torque control device adapted to be connected to the guide wire for rotating the guide wire; and

a spacer member placed between the torque control device and the restraining sheath for preventing the restraining sheath from moving proximally on the guide wire until the spacer member is removed.

2. The system of claim 1, further including:

a wire introducer associated with the torque control device, the wire introducer having a tubular member which extends distally away from the torque control device to help prevent the guide wire from bending when the restraining sheath is retracted proximally on the guide wire towards the torque control handle.

3. The system of claim 1, further including:

means associated with the torque control device to help prevent the guide wire from bending when the restraining sheath is retracted proximally on the guide wire towards the torque control handle.

4. The system of claim 2, further including:

means for locking the torque control device to the wire introducer.

5. The system of claim 1, wherein:

the spacer member has a longitudinal length equal to or greater than the longitudinal length of the filter assembly.

6. The system of claim 1, wherein:

the restraining sheath has a proximal end and the spacer member has a first end and a second end, the second end being in abutting relationship with the proximal end of the restraining sheath.

7. The system of claim 2, wherein:

the restraining sheath has a proximal end and the spacer member has a first end and a second end, the second end being in abutting relationship with the proximal end of the restraining sheath and the first end being in abutting relationship with the end of the tubular member of the wire introducer.

8. The system of claim 7, wherein:

a fitting forms the proximal end of the restraining sheath.

9. The system of claim 6, wherein:

a fitting forms the proximal end of the restraining sheath.

10. The system of claim 1, wherein:

the spacer member has a lumen through which the guide wire extends and a slit extending therethrough for allowing the spacer member to be removed from the guide wire.

11 The system of claim 1, wherein:

the spacer member has a lumen through which the guide wire extends and a perforated score line extending therethrough which is capable of tearing to allow the spacer member to be removed from the guide wire.

12. The system of claim 1, further including:

means for locking the torque control device onto the guide wire.

13. The system of claim 1, wherein:

the spacer member has a first end and a second end, each first and second ends having an outwardly extending flare for creating an extended shoulder region.

14. An embolic protection system, comprising:

a guide wire having a distal end;

an expandable filter located near the distal end of the guide wire;

a restraining sheath extending over the guide wire in a coaxial arrangement and adapted to maintain the expandable filter in a collapsed position, the restraining sheath having a proximal end and a distal end;

a torque control device adapted to be connected to the guide wire for rotating the guide wire; and

a spacer member adapted to be removably connected to the guide wire and placed between the torque control device and the proximal end of the restraining sheath for preventing the restraining sheath from moving proximally on the guide wire until the spacer member is removed from the guide wire.

15. The system of claim 14, further including:

a wire introducer associated with the torque control device, the wire introducer having a tubular member which extends distally away from the torque control device to help prevent the guide wire from bending when the restraining sheath is retracted proximally towards the torque control handle.

16. The system of claim 14, further including:

means associated with the torque control device to help prevent the guide wire from bending when the restraining sheath is retracted proximally on the guide wire towards the torque control handle.

17. The system of claim 14, further including:

means for locking the torque control device to the wire introducer.

18. The system of claim 14 wherein:

the spacer member has a longitudinal length equal to or greater than the longitudinal length of the filter assembly.

19. The system of claim 14, wherein:

the restraining sheath has a proximal end and the spacer member has a first end and a second end, the second end being in abutting relationship with the proximal end of the restraining sheath.

20. The system of claim 15, wherein:

the restraining sheath has a proximal end and the spacer member has a first end and a second end, the second end being in abutting relationship with the proximal end of the restraining sheath and the first end being in abutting relationship with the end of the tubular member of the wire introducer.

21. The system of claim 20, wherein:

a fitting forms the proximal end of the restraining sheath.

22. The system of claim 19, wherein:

a fitting forms the proximal end of the restraining sheath.

23. The system of claim 14, wherein:

the spacer member has a lumen through which the guide wire extends and a slit extending therethrough for allowing the spacer member to be removed from the guide wire.

24. The system of claim 14, wherein:

the spacer member has a lumen through which the guide wire extends and a perforated score line extending therethrough which is capable of tearing to allow the spacer member to be removed from the guide wire.

25. The system of claim 14, further including:

means for locking the torque control device onto the guide wire.

26. The system of claim 14, wherein:

the spacer member has a first end and a second end, each first and second ends having an outwardly extending flare for creating an extended shoulder region.

27. A method for deploying within a body lumen an embolic protection device, which includes a guide wire, an expandable filter disposed on the guide wire, and a restraining sheath for maintaining the expandable filter in a collapsed position, comprising:

placing a deployment control system on the guide wire proximal to the expandable filter, the deployment control system including a torque control device for rotating the guide wire and a spacer member disposed between the torque control device and the proximal end of the restraining sheath;

introducing the embolic protection device with the attached deployment control system into the body vessel;

advancing the expandable filter of the embolic protection device to the desired location in the body vessel;

removing the spacer member from the guide wire; and

moving the restraining sheath proximally toward the torque control device to retract the retaining sheath and deploy the expandable filter within the body vessel.

28. The method of claim 27, wherein:

the deployment control system further includes a wire introducer disposed between the torque control device and spacer member, the wire introducer having a tubular member which extends distally away from the torque control device to help prevent the guide wire from bending when the restraining sheath is moved proximally on the guide wire towards the torque control handle.

29. The method of claim 28, wherein:

the restraining sheath has a proximal fitting for receiving the guide wire and the spacer member has a first end and a second end, the second end being in abutting relationship with the fitting of the restraining sheath and the first end being in abutting relationship with the end of the tubular member of the wire introducer when the embolic protection device is introduced into the body vessel.

30. The method of claim 27 wherein:

the deployment control system further includes means for locking the torque control device to the wire introducer.

31. The method of claim 27, wherein:

the spacer member has a lumen through which the guide wire extends and a slit extending therethrough for allowing the spacer member to be removed from the guide wire.

32. The method of claim 27, wherein:

the spacer member has a lumen through which the guide wire extends and a perforated score line extending therethrough which is capable of tearing to allow the spacer member to be removed from the guide wire.

33. The method of claim 29, wherein:

the deployment control system further includes means for locking the torque control device to the wire introducer.

34. The method of claim 27 wherein:

after the expandable filter is deployed, the following:

removing the restraining sheath and deployment control system from the guide wire; and

advancing an interventional device along the guide wire to an area to be treated within the body vessel.

35. A system for recovering an embolic protection device which includes a guide wire and expandable filter disposed thereon, comprising:

an inner catheter having a distal portion and a proximal end and being moveable along the guide wire;

a control handle attached to the proximal end of the inner catheter;

a recovery sheath having a distal end and a proximal end; and

a control handle attached to the proximal end of the recovery sheath, wherein the inner catheter is capable of being loaded inside the recovery sheath with the distal portion of the inner catheter extending distally beyond the distal end of the recovery sheath when the inner catheter and recovery sheath are being advanced along the guide wire for placement in proximity to the expandable filter of the embolic protection device, the recovery sheath having sufficient column strength to collapse the expandable filter when advanced over the expandable filter.

36. The system of claim 35, wherein:

the recovery sheath may be up to 15 centimeters shorter than the inner catheter.

37. The system of claim 35, wherein:

the recovery sheath has greater column strength than the inner catheter.

38. The system of claim 35, wherein:

the inner catheter has greater column strength than the recovery sheath.

39. The system of claim 35, further including:

a locking mechanism for locking the control handle of the inner catheter with the control handle of the recovery sheath.

40. The system of claim 35, wherein:

the control handle of the inner catheter can be locked with the control handle of the recovery sheath.

41. The system of claim 35, wherein:

the control handle of the inner catheter is coaxially disposed within a lumen of the control handle of the recovery sheath.

42. The system of claim 41, wherein:

the control handle of the inner catheter can be locked with the control handle of the recovery sheath.

43. The system of claim 42, wherein:

the control handle of the inner catheter is movable relative to the control handle of the recovery sheath.

44. The system of claim 35, further including:

means for locking the inner catheter onto the guide wire.

45. An embolic protection system, comprising:

a guide wire having a distal end;

an expandable filter located near the distal end of the guide wire;

an inner catheter having a distal portion and a control handle located at a proximal end, wherein the inner catheter is capable of being introduced over the guide wire; and

a recovery sheath having a distal end and a control handle located at a proximal end, wherein the inner catheter is capable of being loaded inside of a lumen of the recovery sheath, wherein the distal portion of the inner catheter extends distally beyond the distal end of recovery sheath when being advanced along the guide wire to retrieve the expandable filter, the recovery sheath having sufficient column strength to collapse the expandable filter when advanced over the expandable filter.

46. The system of claim 45, wherein:

the recovery sheath may be up to 15 centimeters shorter than the inner catheter.

47. The system of claim 45, wherein:

the recovery sheath has greater column strength than the inner catheter.

48. The system of claim 45, wherein:

the inner catheter has greater column strength than the recovery sheath.

49. The system of claim 45, further including:

a locking mechanism for locking the control handle of the inner catheter with the control handle of the recovery sheath.

50. The system of claim 45, wherein:

the control handle of the inner catheter can be locked with the control handle of the recovery sheath.

51. The system of claim 45, wherein:

the control handle of the inner catheter is coaxially disposed within a lumen of the control handle of the recovery sheath.

52. The system of claim 51, wherein:

the control handle of the inner catheter can be locked with the control handle of the recovery sheath.

53. The system of claim 52, wherein:

the control handle of the inner catheter is movable relative to the control handle of the recovery sheath and further including means for locking the control handles together.

54. A method of recovering an embolic protection device which includes a guide wire and an expandable filter from a body vessel, comprising:

loading an inner catheter inside a recovery sheath, wherein the inner catheter has a distal portion which extends beyond the distal end of the recovery lumen;

introducing the inner catheter and recovery sheath over the guide wire;

advancing the distal end of the inner catheter to a position adjacent to the expanded filter;

locking the inner catheter onto the guide wire;

advancing the recovery sheath over the distal portion of the inner catheter and the expanded filter to collapse the expanded filter.

55. The method of claim 54, further comprising:

removing the recovery sheath, inner catheter, and embolic protection device from the body vessel.

56. The method of claim 54, wherein:

the recovery sheath may be up to approximately 15 centimeters shorter than the inner catheter.

57. The method of claim 54, wherein:

the distal portion of the inner catheter may extend up to 10 centimeters beyond the distal end of the recovery sheath when being advanced over the guide wire.

58. The method of claim 54, wherein:

a control handle is located at the proximal end of the inner catheter and a control handle located at the proximal end of the recovery sheath.

59. The method of claim 58, wherein:

the control handle of the inner catheter can be locked to the control handle of the recovery sheath.

60. The method of claim 54, wherein:

after the distal end of the inner catheter is advanced to a position adjacent to the expanded filter, a torque control device is attached to the guide wire and placed in an abutting relationship with the proximal end of the inner catheter to lock the inner catheter onto the guide wire.

61. The method of claim 58, wherein:

after the distal end of the inner catheter is advanced to a position adjacent to the expanded filter, a torque control device is attached to the guide wire and placed in an abutting relationship with the control handle of the inner catheter to lock the inner catheter onto the guide wire.

62. The method of claim 58, wherein:

control handle of the recovery sheath is advanced distally to position the recovery sheath over the distal portion of the inner catheter and the expanded filter to collapse the expanded filter.